Claims

1. Method for backup switching spatially separated switching systems, which are arranged in pairs in a 1:1 redundancy, wherein one switching system (S_1) is in an active operating state ("act") and the remaining redundant switching system (S_{Ib}) is in a hot standby operating state ("idle"), characterized in that communication is established between at least one higher-order real-time capable monitor (SC) and at least one of the switching systems (S_1, S_{1b}) arranged in pairs and, in that in the case of loss of communication to the active switching system (S_1) a changeover is made to the redundant switching system (S_{1b}) with the aid of a network management (NM) and the central controller (CP) of the redundant switching system (S_{1b}).

2. Method according to claim 1, characterized in that cyclical test messages are exchanged between the at least one higher-order monitor (SC) and the central controllers (CP) of the two switching systems (S_1, S_{1b}) arranged in pairs.

3. Method according to claim 1, 2, characterized in that the exchange of cyclical test messages between the at least one higher-order monitor (SC) and the central controller (CP) of the active switching system (S_1) is controlled in that, with the aid of its central controller (CP), the active switching system (S_1) cyclically reports to the monitor (SC) and thereupon receives a positive acknowledgement (for example every 10 s).

4. Method according to claim 1, 2, characterized in that the exchange of cyclical test messages between the at least one higher-order monitor (SC) and the central controller (CP) of

the hot standby switching system (S_{1b}) is controlled in that, with the aid of its central controller (CP), the hot standby switching system (S_{1b}) cyclically reports to the monitor (SC) and thereupon does not receive an acknowledgement or receives a negative acknowledgement (for example every 10 s).

5. Method according to claim 1 to 4, characterized in that the verified loss of communication to the switching-active switching system is reported from at least one monitor (SC) to the network management (NM) which, according to the availability of switching system (S_{1b}), thereupon sends changeover commands to the at least one monitor (SC) and the crossconnect device (CC).

6. Method according to claim 1, 2 or 3, characterized in that the changeover to the redundant switching system (S_{1b}) is controlled by the monitor (SC) in that it acknowledges the cyclical demands ("request") of the hot standby switching system (S_{1b}) with a positive acknowledgement, whereupon this switching system (S_{1b}) is explicitly controlled by its central controller (CP) into the switching-active state.

7. Method according to any one of the preceding claims, characterized in that after resolving the loss of communication, automatic switching back to the configuration existing before the loss of communication does not take place.

8. Method according to claim 7, characterized in that the end of the loss of communication between a switching system and one of the monitors is reported to the network management (NM).

9. Method according to any one of the preceding claims, characterized in that the network management system (NM)

initiates the changeover to the respective switching-inactive switching system via the at least one monitor.

10. Method according to any one of the preceding claims, characterized in that the network management evaluates the backup switching requirements of a plurality of monitors and the backup switching operation of the switching-active switching system is only carried out if any of the monitors that can access the network management makes the demand.